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VENTILATION OF DWELLINGS AND SICK ROOMS.

By EDWARD JARVIS, M.D., Dorchester. Read before the Norfolk Medical Society, January 10, 1872.

ALTHOUGH all mankind, from Adam to us, have, in all their lives, awake or asleep, performed the incessant process of respiration, they have not, until within a recent period, thought that they must make preparation for it. Being an involuntary function, and air being spread all abroad, they have hitherto felt no responsibility for this operation. They have built houses, shops, churches, school-rooms and theatres as impervious to air as the carpenter's skill could make them, with no suspicion that this exclusion had any thing to do with health.

Within a century, men have begun to think that they suffered when gathered in great numbers in public halls, churches, theatres, &c., and have devised many means and ways of introducing fresh air, and some ways of removing the foul. By these means, the air of these rooms is greatly improved, and the health of those who lived in them, for longer or shorter periods, has been less injured. Yet this work is very far from complete; and, notwithstanding the many plans of ventilation offered, and a very large part of them with good properties and powers, the question of supplying many of these public buildings with sufficient fresh air is one of the most troublesome, and is yet answered in an unsatisfactory manner.

This difficulty is felt the most in hospitals, where the air of the wards is most corrupted, not only by the respiration, but by the exhalations from the diseased inmates. There is not only the difficulty of removing from these wards all these offensive and injurious exhalations, and supplying their place with uncorrupted air, but there is the additional danger, or the fear of danger, of disturbing the patients with drafts, and possibly of chills.

Although much has been done for public institutions in this respect, and our hospitals are ventilated, or attempted to be ventilated, with various degrees of success, yet it is rare that any attempt has been made to ventilate private dwellings, and even of those for which some means of ventilation are tried, these are generally confined to the rooms which the family occupy most of the time, the parlor, sitting-room, and perhaps the nursery. The sleeping chambers, which, generally, are occupied by smaller numbers, are seldom considered of sufficient importance to have any special provision made for their purification.

Before the invention of stoves, when every house and most rooms were heated by wood fires in open fireplaces, there was sufficient ventilation through the open chimney, especially in cold weather, when good fires were made, and a strong draft carried most of the air of the room up the chimney.

This was accidental. The removal of the foul air was no part of the plan of the architect, and more than this his plan was to exclude as completely as possible all access of fresh air from abroad. Fortunately for the health of the families, the theoretical error of the architect was defeated by the practical error of the carpenter, who, with all his skill and endeavor, rarely succeeded in making the rooms perfectly air-tight. So the air came in from abroad, through the undesignated cracks of the walls and floors, and the imperfect fittings of the windows and doors. By these means, of the open chimney and the unwelcome apertures, the rooms of old houses, especially farm-houses in the country, were ventilated. And even now, in many such houses, the fireplaces of the chambers, which are occupied by the sick, are still open and serve the purpose of ventilation.

Few modern houses have such means of purification. Many of them have no chimney, except one for the furnace and another for the kitchen, which is generally warmed by the cooking-stove. The other rooms have no chimney and of course no fireplace.

Most houses are warmed by stoves. There

are chimneys running through all the rooms. In the old houses, the fireplaces are closed with brick walls, or with sheet iron or tin, to compel the draft through the stove. The new houses are built without fireplaces, and only an aperture in the chimney for the stove funnel. The stove produces some draft, for all the air needed for the combustion of wood or coal must be drawn from the room; but this is much less than the current of air that went up through the chimney with the smoke from the open fire. The economical plan of the stove is to prevent all loss of heat by the current of warmed air passing off, as was supposed, needlessly. These rooms may be ventilated by having an opening in the brick wall, or sheet iron, by which the fireplace is closed.

I occupy a house which was built early in the last century. Seven of the rooms had open fire-places, and all were formerly heated by wood fires; but now all of these are heated by coal-stoves. The fire-places are closed by brick walls, but in each of these walls there is left an aperture six inches square for ventilation, which may be closed by a valve if occasion require. Winter and summer there is a constant current from the rooms through these apertures into the chimney and upward and outward. When there is a fire burning in the stove, and the chimney heated, this current is very strong. It is sufficient to draw a handkerchief into the chimney, if laid upon the hole, and the pressure will hold a paper closely over it against the wall.

This means of ventilation is effective and successful. Going into the room, if occupied, it is easy at once to perceive whether the valve is open or closed; and if closed the air is perceptibly foul, but it is soon changed and made pure and agreeable if the valve be opened.

This method is very simple and easily adopted in any room furnished with a chimney, if there be a fire-place that is closed; and if there be merely a chimney for a stove, a hole can be cut at any desirable height from the floor. These apertures are ordinarily sufficient to carry the foul air out.

Our carpenters have not yet reached their desired perfection of skill that would enable them to make the rooms so completely air-tight that no fresh air can get in. If, however, the undesigned apertures are insufficient for this purpose, then opening a door leading into the entry is generally sufficient in the winter.

With the present conviction of the necessity of ventilation, and the present

knowledge of the means, no house should be built without preparation for this purpose.

Among all the plans of ventilating there are only two that are reliably certain.

1. Force. The fan, which drives fresh air in, or by suction draws the foul air out. This implies a motive power—steam or other engine—which is used in public institutions and other large establishments, but cannot be obtained in dwellings.

2. Heat, creating an upward current in some duct leading outward through the roof. This can be applied to dwellings, as just described, by means of a heated chimney.

This can and should be modified so as to include the rooms which have no chimney as well as those which are thus supplied, by the means of ducts leading from these rooms to a chimney where there is a constant fire.

There is a row of tenements very near a large factory in Glasgow, Scotland, occupied by the families of the poor workmen. These dwellings were small, the rooms close, without ventilation. The street or lane was narrow and dirty, with plentiful filth and foul exhalations. For a long period there was constant and very abundant sickness in these families. Typhoid fever was never absent, dysentery almost constant; consumption and rheumatism were very frequent. The women were pale and haggard, the children feeble and sickly, and the men were not vigorous. The air was very foul and oppressive. Neil Arnott, or some other practical philosopher, suggested that tin tubes be made and applied to all these houses, and lead from them into the chimney of the factory, which was 200 feet or more high and constantly heated, and through which was a powerful draft. The plan was adopted, and the rooms were ventilated; the air in all became sweet. Sickness at once diminished and soon disappeared. The houses became healthy, and the people in them became as strong as in other dwellings.

Two other instances nearer home of the application of this principle now occur to me. At a house in Cohasset, the privy at the end of the shed was troublesome from its emanations from the closed vault into the room above and the shed. The owner connected this vault by a tin tube laid under the floor of the shed with the kitchen chimney, which was thirty or more feet distant. The constant heat and upward current of the chimney caused a draft from the vault and carried off the gases, and

both the privy and shed thereafter were free from all offensive odor. The other example was similar in its original evil, the means of relief and purity afterwards.

This principle, or connection with a constantly heated chimney, can and should be applied to all the rooms of every dwelling.

In building a house with a single chimney for a furnace and the kitchen, it is well to have a special and separate duct for ventilation by the side of the smoke duct and have the foul-air pipes lead into this. The heat of the smoke from the furnace and kitchen will warm the contiguous surrounding duct and create an upward current therein. The better way, when there is a single duct, as from a furnace, is to make this large, 12 or 15 inches in diameter, round and smooth inside, for the ventilation; then to put a cast iron smoke-pipe, 8 inches in diameter, through the middle of this larger duct, from the furnace to the outer air. This makes an excellent smoke duct, and thoroughly heats the foul air in the ventilating tube.

In this, and all plans of ventilation by this means, it is well to provide for the season when there is no fire in the furnace. This is easily done by having a large argand or kerosene lamp, or gas burner in the ventilating duct, and an aperture, closed with a door, through which it may be lighted. The heat of the lamp or gas is sufficient to warm the air of the duct, and create an upward current.

Two members of this Society have built houses recently, with especial eye to ventilation. All the rooms are connected with a ventilating shaft or duct, and are all pure and healthy. Their example is commended to all who wish to build healthful dwellings for their families.

Our greatest difficulty is with the air of the sick room; this is increased by the very common fear that the patient will suffer from cold and drafts. Hence not only are these rooms deprived of all known means of ventilation, but every method that the minds and well-intended kindness of the family can devise is used to prevent the possible access of air.

I was witness of an instance of this extreme but, perhaps, undue tenderness, in my early practice. I was called to see the daughter of a wealthy farmer, in winter, when the ground was covered with snow. She had pulmonary hæmorrhage. The family were consumptive. The room was warmed, even heated. The blinds were shut, the windows were closed, paper was pasted over all the junctures of the sashes

with the casements. Paper curtains covered them, and then blankets were hung over each. The door was listed, and blankets hung before it; and another blanket was suspended on a clothes-horse before the door, so that no possible current of air through the door could reach the patient when any one came in. The patient was on a feather bed, well covered with blankets.

I at once requested that all the blankets should be taken away from the windows, the paper curtains removed, and the blinds opened. The family reluctantly consented; but the patient said she enjoyed the light, and suffered no discomfort from the removal of the curtains. The temperature of the chamber was reduced to 70°, and the patient breathed more easily. In a few days, I proposed that she should ride abroad in a sleigh. With more misgivings than before, the family concurred. As she was well protected by clothing, blankets and buffalo robes, she suffered nothing from the exposure, but said she felt stronger. She continued this riding abroad almost daily, and, in a few months, regained her usual health. She afterwards married, and took excellent care of her family. She died thirty years later, of some other than pulmonary disease.

#### A CASE OF CRIMINAL ABORTION, FOLLOWED BY PELVIC ABSCESS. PUS DISCHARGED BY THE RECTUM. RECOVERY.

By GEO. W. GAY, M.D., Boston.

Mrs. H., aged 28 years, summoned me April 9th, 1869. She reported herself as having enjoyed vigorous health until her present illness. She dated her last menstruation in December, 1868. I found her threatened with abortion. It appeared that, desiring no children, she had applied, thirteen days previously, to an abortionist who had used some instrument to terminate her pregnancy. This operation not being successful, it was repeated after a week.

Three days before my visit, she was attacked with pain in the back. There had been no hæmorrhage until that day (April 9th), and it was, at that time, only moderate in amount. Pulse, 120; chills and fever, nausea and vomiting; pains recurring at intervals of five minutes. Os dilated to three-quarters of an inch in diameter, the membranes still entire. The motions of the fœtus were active.

The vagina was plugged with colpeurynter, and one-fourth of a grain of sulph.

morphia prescribed, with absolute rest in bed.

The following day there was no hæmorrhage after removal of tampon, except when the patient got up. The symptoms in general were unchanged, and the opiate was continued.

On the fourth day, there was a chill, with constant pain in the back. The os was dilated to an inch, and the membranes protruded. The tampon was reapplied, and half a drachm of fluid extract of ergot given every three hours.

From this time, no essential change in the symptoms occurred until the seventh day. Moderate hæmorrhage continued, which was combatted with the plug and with ergot. There was pretty constant pain in the back and abdomen, and occasionally a chill. On the seventh day, the membranes protruding, they were ruptured, and a four months fetus removed. The placenta was adherent, and hæmorrhage followed in moderate amount. The tampon was replaced and the ergot continued. The day following, the placenta was removed with a little difficulty.

Six days later, the patient having been comfortable in the interval, there supervened severe abdominal pain with anorexia, thirst and foul tongue. The abdomen was tender. The lochia continued normal. In forty-eight hours the pain extended through the left side and down the thigh, and was attended with nausea and vomiting. A diarrhoea, with green dejections, now followed, and was coincident with a subsidence of the symptoms. After an interval of three days, however, the pain and tenderness of the abdomen recurred; on this occasion located in the left inguinal region. Vaginal examination found the uterus fixed, without displacement; the *os tincæ* admitted the sound, without pain, a distance of three and a half inches. Examination by the rectum discovered a firm and tender induration filling the pelvis, occupying the cavity on both sides and behind the uterus. Opiates and fomentations were administered *pro re nata*. Next day, there was tympanites, with increased tenderness. Dr. Buckingham saw the patient in consultation, and advised a vaginal injection of carbolic acid in glycerine and water, the discharge having become fetid. Treatment otherwise to be continued.

Two days later, the patient had six dejections in twenty-four hours, the stools consisting of one or two ounces of thick, creamy pus, with very little fecal matter. These purulent dejections continued in va-

riable amount for seventeen days, and were coincident with a marked improvement in all the symptoms.

An exacerbation of the former distress now followed, with a renewal of the inguinal induration, the abdominal pain and tenderness, the fever and the general disturbance. On vaginal examination, the pelvic tumor was found recurrent. At the same time, the catamenia reappeared, forty-four days after the birth of the child. The bowels were constipated, but were freely relieved by *ol. ricini*, and much of the pelvic distress subsided, not, however, with any marked change in the physical signs.

June 14.—Forty-four days after the first appearance of the pelvic inflammation, Dr. Cheever saw the patient in consultation. At that time, there was marked tenderness over the uterus, with quite severe pain. A thorough examination was made under ether, and a large indurated mass was found filling the space behind and on both sides of the uterus and upper section of the vagina. No point of softening or fluctuation was determined. Full diet, tonics and opiates were continued as before.

June 23.—The catamenia recurred, relieving the pelvic pain. The bowels continued to discharge pus with the dejections.

From this date forward, convalescence progressed. The purulent discharges subsided, the pain receded, the induration around the uterus gradually diminished, and the general condition improved proportionally. August 7th, the patient sat up for the first time in seventeen weeks.

At the present writing, the patient reports herself in perfect health, with no troubles attributable to her peri-uterine inflammation.

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## Reports of Medical Societies.

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SUFFOLK DISTRICT MEDICAL SOCIETY. REPORTED

BY J. H. MC'COLLUM, M.D., BOSTON.

The Society met Jan. 27th, Dr. Wheeler, of Chelsea, in the chair.

*Pyelitis, with Cancer of the Kidney.*—Dr. Sinclair reported the case and exhibited the diseased kidney.

The patient, a woman about 60 years of age, had complained of symptoms referable to the kidneys for a long time. When seen by Dr. S., a tumor, painful on pressure, was detected in the left side, extending upward into the region of the spleen and laterally to the umbilicus. Pus was



found in the urine at various times. There was considerable salivation and some nausea. Two days previous to death, while the patient was on the night chair, she felt something give way, as she expressed it, and immediately symptoms of exhaustion became apparent, from which she did not rally.

At the autopsy, which was made by Dr. Webber, the body was of a decidedly jaundiced hue. On opening the abdomen, a considerable quantity of pus was found in its cavity, and the surface of the intestines and other organs were coated with lymph. The left side of the peritoneal cavity was nearly filled by a tumor, adherent to the intestines, across which ran the descending colon. At the lower and outer edge of this tumor was a small rupture, through which pus escaped. The tumor proved to be an enlarged kidney, which had changed into a mass of cysts, between which the tissue had become cancerous. The ureter was adherent to the diseased mass, and near its upper end the cancer had eaten through its walls and appeared on the inside. Bladder healthy. The liver contained one large and several small scattered nodules of cancer. The right kidney had undergone fatty degeneration to a considerable extent.

Dr. Haskins called attention to nausea and vomiting as prominent symptoms in pyelitis.

Dr. Jackson reported a case in which the pelvis and infundibula of the kidney were coated with opaque lymph, and in which two calculi which were found were probably the cause of the disease. Dr. J. remarked that in dilatation of the pelvis of the kidney by fluid it is very rarely the case that inflammation of the lining membrane ensues. He also stated that in these cases suppuration of the substance of the kidney is seldom if ever seen. He also called the attention of the Society to a case which occurred at the Massachusetts General Hospital some years ago, in which the disease was overlooked on account of the severity of the symptoms referable to the bladder.

*Pyelitis.*—Dr. Wheeler reported a case of pyelitis, and exhibited the specimen. The outlines of the case are as follows.

A woman, 39 years of age, had been an invalid for eight years. For the last two years she had suffered from some uterine trouble, and had also complained of some of the symptoms of disease of the bladder. Pus had been detected in the urine during this time at various intervals. In July, a tumor was noticed in the left lumbar region,

and at the same time pain in the left side extending down the leg and following the course of the crural nerve. In September the patient had an attack of hectic, and as she was gradually failing it was decided to puncture the tumor, which had now attained the size of a cocoanut. A trocar was passed into the posterior aspect of the tumor near the spinous processes of the vertebrae, and nearly a pint of pus was evacuated. Considerable relief followed the operation, and the pus disappeared from the urine. The caula was worn about four weeks, during which there was an almost constant discharge of pus, which, however, suddenly stopped at the expiration of this time. The patient was advised to submit to a second operation, but refused to give her consent.

In this case, as in the one reported by Dr. Sinclair, the patient felt something give way while she was being moved, and immediately became collapsed, from which condition she did not rally. The autopsy was performed twenty-four hours after death. There was a considerable quantity of fat in the walls of the abdomen. No evidences of disease were found in the heart, lungs or liver. A large cyst was found in the right kidney. The pelvis of the left was much dilated and the substance of the kidney disorganized.

*Case of Impalement.*—Dr. Jackson reported a remarkable case of impalement which occurred in the practice of Dr. Jos. Sargent, of Worcester. [Published in the JOURNAL for Feb. 22d.]

*Hæmatemesis.*—Dr. Jackson reported a case which had recently occurred in the practice of Dr. G. S. Jones. The patient was a policeman, and attributed his disease to injuries he had received at different times in the performance of his duties. About two years ago he had copious hæmatemesis, and again last spring. During the last few weeks it had occurred quite a number of times, very copiously. Some yellowness of the skin was noticed, as is often the case in cirrhosis. The spleen, which was enlarged, was much enlarged. The stomach contained a large quantity of blood, but there was no ulceration of the organ. There was extensive cadaveric softening of the left extremity, however, so that the blood gushed out into the peritoneal cavity when the organ was raised. Dr. J. referred to a distinguished merchant of this city, who died many years ago from copious hæmatemesis, the result of cirrhosis; but he did not think the disease so frequent here as it seems to be in some places. He also

referred to the usual and probably correct explanation of ascites and hemorrhage from the stomach in cases of cirrhosis, and spoke of the importance of examining for enlargement of the spleen after tapping for ascites in suspected cases of cirrhosis.

## Bibliographical Notices.

*De Operatie der Senile Cataract.* Academisch Proefschrift, door C. H. A. WESTHOFF. Utrecht. 1871.

*The Operation for Senile Cataract.* Academic Thesis by C. H. A. WESTHOFF. Utrecht. 1871.

THE progress of ophthalmology is occasionally signalled at the school of Utrecht by a thesis from one of its younger disciples. Thus, in past years, Gutteling gave the description and results of Snellen's new operation for Entropium,\* Haffmanns the theory of Donders on the subject of Glaucoma,† De Wilde the treatment of Iritis and Iritochoroiditis,‡ and Westhoff the present pamphlet. It furnishes an account of the modern operation for cataract, which, since 1866, has taken the place of the old flap method at Utrecht, details the after-treatment there in vogue, and closes with a full table of results.

It opens with a definition of cataract, giving some of the views formerly entertained as to its nature, and the more modern ones of Förster concerning its pathological anatomy, discusses the different forms of senile cataract, and alludes to some of the methods of external treatment once in vogue, especially galvanism and phosphoretted oil. The different operations are next referred to, and it is interesting to learn that reclinacion has never yet been performed at the Utrecht Hospital. There is a good *résumé* of the modifications of the flap operation, and of the experiments with scoops that preceded the introduction of the peripheric linear. Allusion is made to the discussion between Graefe and Hasner, as to the relative merits of linear and flap extraction, and to the interest with which it was followed by the whole ophthalmic world. In consequence—

“With the exception of Hasner, all ophthalmologists have profited by the valuable

labors of Graefe, and cataract is now hardly operated on, save by his method.”

The operation, as performed at Utrecht, differs in no essential particular from that done by Graefe himself, the operator following his example in standing behind the patient when the cataract is on the right side, and sitting in front when it is on the left. Should the wound prove too small, it is advised to use the curved knife of Taylor for the purpose of enlarging it.

Great stress is laid on the reposition of the cut edges of the iris, after the iridectomy has been performed, a prolapse of the iris being recognized as giving rise to irregular curvature of the cornea and secondary glaucoma, besides dragging the pupil upwards.

If, in opening the capsule of a very hard cataract, the action of the cystitome has dislocated the lens upwards, the same instrument should be used to effect its reposition. It is advised that the operator use convex glasses at this stage, in order to the better appreciate any slight movement of the crystalline.

We regret to see so little stress laid on the principle of following up the lens, step by step, from the lower edge of the cornea, till the last particle has emerged, thus avoiding the leaving behind fragments of cortical substance. The proper removal of the lens is one of the most important steps of the operation, and its possible complications should be dilated on at length.

The after-treatment differs somewhat from that practised at Berlin. The compressive bandage is not changed for twenty-four hours, and atropine is then instilled, instead of waiting three days as Graefe advised. After six days the bandage is discontinued.

Owing to the variation in the astigmatism the first few months after the operation, it is advised not to finally determine the glasses to be used until three months have elapsed.

Dr. Snellen's treatment of threatened suppuration in the wound differs materially from that counselled by Graefe. He discards calomel and blood-letting, gives quinine and wine internally, uses the constrictive bandage, and orders open air exercise.

“If the least signs of suppuration in the wound are perceptible, though it be the first day after the operation, the patient is to leave his bed and walk in the garden. Exercise and fatigue accelerate the circulation and absorption; through them we have seen extremely critical cases end in entire recovery.”

\* De Behandeling van de Binnenwaartskeering der Oogleden. C. Gutteling. Utrecht. 1860.

† Bijdrage tot de Kennis van het Glaucoma. J. H. A. Haffmanns. Utrecht. 1861.

‡ Eenige Gevallen van Iritis en Iritochoroiditis. A. J. P. De Wilde. Utrecht. 1861.

The thesis closes as follows:—

"The results of our experience justify the statement that the operation here followed offers advantages beyond all previous methods. It affords greater security against loss of the eye than flap-extraction, but is decidedly more difficult and requires a larger experience. As a feat of surgical dexterity, it is less striking than the flap. The iridectomy, which destroys the roundness of the pupil, is no special disadvantage. If no glass is used, a round pupil is a stenopaic apparatus of indisputable value, but the advantageous employment of the corrective lens is in no wise hindered by the artificial pupil made upwards.

"Linear extraction with a lance knife is more easy, and recovery from it is more rapid; it is to be advised in cases specially adapted to it. The method just described is to be limited, in our opinion, to the extraction of hard senile cataract, for which it possesses advantages above all others. Its invention is one of the many invaluable services of Albrecht von Graefe, in the field of clinical ophthalmology."

There follow the statistics of the cataract operations done according to this method at the Netherland Ophthalmic Hospital, between the years 1866 and 1871. Cases occurring in private practice are excluded. In stating the vision, the precise fraction is in each case given, *i. e.* the size of type seen and the distance in which it is distinguished, no reduction of the fraction to lowest terms being made.

There were in all 209 cases, 81 males and 128 females. Five failures occurred. In 26 cases, a secondary operation was necessary. All but 16 of the whole number of patients were operated on by Dr. Snellen. Loss of vitreous occurred forty-three times, but it is worthy of remark that the slightest escape of this humor is carefully noted. All the earlier operations are included in the list.

#### Condensed Table of Results.

Vision exceeding $\frac{1}{2}$	106
" less than $\frac{1}{2}$ , but exceeding $\frac{1}{4}$	15
" " " " " "	52
" less than $\frac{1}{4}$	20
Perception of light	3
Unrecorded*	8
Lost	5
	209

HASKET DERBY.

\* Four of these are known to have had good vision. In two others the operation succeeded, but degeneration in the region of the macula lutea was discovered.

*A Handbook of Therapeutics.* By SYDNEY RINGER, M.D. Second Edition. New York: Wm. Wood & Co. 1871. Pp. 483.

We do not think that we should give this book into the hands of those for whom it is said by the author to be specially intended, *viz.*, "students and young practitioners," but rather those to whom experience has supplied the *granum salis* with which very confident statements as to the wonderful curative effects of many drugs should be taken.

With this grain of salt, however, this little book is to the practitioner a very useful and suggestive one. The views held are clearly and definitely stated, and the practical points brought out with great distinctness. Whether we agree with the author or not, the effect of a definite statement of what he thinks can and what cannot be done, is very satisfactory, and such statements characterize this work much more than the usual treatises on therapeutics. The present treatise has been revised and enlarged, and its American dress is a very neat one. E.

*Lectures on the Clinical Uses of Electricity, delivered in University College Hospital.* By J. RUSSELL REYNOLDS, M.D., F.R.S., &c. Philadelphia: Lindsay and Blakiston. 1872. Pp. 112.

THESE lectures, which were delivered during the summer of 1870, in University College Hospital, are very plain and practical. The author, as he states in the introduction, has avoided all debatable points, and has confined himself to ascertained facts in regard to the clinical uses of electricity in the diagnosis and treatment of disease.

The writer is evidently well acquainted with the subject, and while he does not exalt the position of electricity too highly, he tells us clearly and distinctly what we may expect from this agent in the treatment of disease.

Dr. Reynolds does not believe in long sittings or in the use of powerful batteries, and he says that if more attention were paid to these points we should have better results from the use of electricity. The cautions he gives in regard to the quantity to be used in certain cases are very good, and deserve the careful consideration of those who use this agent. The section on the use of electricity as an aid in diagnosis is very plain and direct, and it contains several facts which are not clearly stated by other writers on this subject. It is agreeable to read a work on electricity from

which one can obtain so much information in so short a time as from this. On the whole, this is the best hand-book on this subject with which we are acquainted, and it is well calculated to meet the wants of the general practitioner. The book is neatly bound and the type is good. J.

*The Detection of Criminal Abortion, and a Study of Feticidal Drugs.* By ELY VAN DE WARKER, M.D. Boston: James Campbell. 1872. Pp. 88.

THIS monograph, or at least the greater portion of it, was originally published, as a serial, in the *Journal of the Gynaecological Society of Boston*. It contains many facts which, while they may not be of any very great practical value to the profession at large, will yet attract and interest those members of it who are engaged in the study of Medical Jurisprudence.

*Consumption: its Pathology and Treatment. To which is appended an Essay on the Use of Alcohol in the Treatment of Consumption.* By WADE MINER LOGAN, M.D. Philadelphia: 1871. Pp. 90.

THE author offers his work to the profession in order to present the results of observations made, and conclusions arrived at, in regard to the Pathology and Treatment of Tubercular Consumption, with respect to the remedial effects of nitric acid. Carpenter's Prize Essay on Alcoholic Liquors furnishes Dr. Logan material for the closing twenty pages of this volume.

Starting with the assumption that the phosphates hold the same relation to tubercle that iron does to hæmatine, he infers that the introduction of phosphates into the system, would increase the tubercular deposit. Some of the arguments in favor of this theory are, that the urine of tuberculous subjects contains an excess of phosphates; that in laryngeal phthisis, the cartilages of the larynx frequently undergo ossification; that in rickets, where there is a deficiency of phosphates, the person subject to this disease rarely becomes tuberculous. He considers that gray tubercle is transformed into yellow by acting as a foreign body, and thus giving rise to inflammation and subsequent exudation; the fluid portions of the latter being absorbed, the solid elements adhere to the gray tubercle, hence the yellow variety.

The softening of tubercle is purely suppurative. Fibrine is the basis for constructive and reparative process. We hope the

author has been able to demonstrate the presence of this substance in inflammation of the brain, or in those alterations giving rise to the connective tissue formation in the granular liver and kidney.

Granted that the urine of tuberculous subjects does contain an excess of phosphates; the same thing occurs in wasting diseases from other causes, in diseases, too, where tubercles have never been found.

One of the most marked instances of ossification of the laryngeal cartilages we have ever seen, occurred in a patient who had epithelioma of the larynx, no where tubercle.

That rickety individuals rarely become tuberculous may be true, not because they are rickety necessarily. At an autopsy of such a person, we saw innumerable bronchopneumonic nodules, many of which had softened.

If our author should give a few weeks of individual study to the genesis of tubercle, and its subsequent history, he would not be so ready to accept its origin from an exudation, to attribute its yellow appearance to the adhesion of inspissated solid elements of inflammatory exudation, and its softening to suppuration.

It being asserted that nitric acid is efficacious in "whooping cough, chronic bronchitis and the hoarseness of singers," it is thus shown "that it exerts a peculiar soothing influence on the irritable state of the lungs, probably in the same manner that chlorate of potash thus acts on the irritable condition of the larynx, or through some such peculiar agency."

Forcible argumentation and clear logic. Disputed facts (?), a common cause attributed to different diseases and the use of the familiar adage, "it is a poor rule," &c. A table of 24 cases is presented to illustrate the author's theory. "These cases were treated with nitric and muriatic acids, aided by various auxiliaries, as counter-irritants, narcotics, expectorants, cod-liver oil where it was tolerated, &c." In this table are found 3 deaths, 10 recoveries, 7 favorable, 1 improved and 3 improving cases.

In the first case of recovery there was no cough during the illness, except during partial pleuritic attacks; dulness and abnormal respiratory sounds entirely disappeared—"proof positive of the anti-phosphatic virtues of my treatment."

Case 4 (of recovery); "at time of dismission \* \* \* there was still evidence of lesion in right lung."

It is unnecessary to make further criti-

cism of the remaining cases. The powers of observation and the judgment of the author have been already sufficiently shown.

Chapter IV., concerning alcohol, leads the author to decide that "except in cases of extreme exhaustion, alcohol is not under any circumstances the consumptive's friend, but, indeed, is his meretricious and stealthy assassin."

## Foreign Correspondence.

### SYPHILIS-CORPUSCLES.

VIENNA, Feb. 9, 1872.

MESSES. EDITORS.—Every chair and every square inch of standing room were filled this evening at the meeting of the "Gesellschaft der Aertze," because of the advertised review of Dr. Losterfer's discovery by Prof. Wedl. Prof. Hebra in the chair.

Prof. Wedl, having first recounted the results of the examinations of Dr. Losterfer, and the steps by which they were said to have been reached, stated that he had pursued the same method in his researches, but had failed to discover any corpuscles in the blood of syphilitics which were not to be found equally in the blood of healthy individuals. He had easily found bodies, similar to those described by Dr. L. as peculiar to syphilitic blood, in almost every specimen of blood examined, both healthy and diseased. They were round, shining bodies, of less size than the blood corpuscles, and having a slightly bluish-green shimmer. Prof. Gruber (aurist) and Docent Dr. Neumann (dermatologist) saw these specimens, and pronounced them to be precisely similar to the bodies which they had seen in Dr. L.'s preparations. Prof. Wedl had then made a preparation of *mistura oleosa*, in which the fat drops were finely broken up, and in which, on comparison with the so-called syphilis-corpuscles, the small fat drops could not be distinguished from the corpuscles. This applied only to the perfectly symmetrical round bodies. Besides these, bodies had been described of various forms and in many cases supplied with one or more sprouts; these the Professor asserted to be "torn-off pieces of protoplasm." The formation of vacuoles was nothing more than a process of decomposition, in which carbonate of ammonia was formed, and which could be demonstrated any day by adding an alkali to fat, and watching their development in the fat. As to the supposed growth of the corpuscles,

this the Professor asserted had not been proved, because Dr. L. had not shown that he had followed one and the same through its various stages of development; moreover, that he himself had watched these same bodies for several weeks, and failed to note the slightest increase in size. In order to remove the blood corpuscles, which had obscured the bodies in dispute, a stream of distilled water had been passed over the slide, and by this means the corpuscles left alone under the microscope. In conclusion, he suggested that the fat had been introduced into the specimen by accident, as, for instance, in pricking the finger to obtain a drop of blood, a few drops of fat might be easily squeezed from out the sebaceous follicles of the skin, and be brought upon the slide with the blood.

Prof. Stricker then rose to combat the scepticism of Prof. Wedl, with a reiteration of the extreme caution used in the tests to which Dr. L. had been subjected, and denied that the Professor could have seen the corpuscles in question; adding further, that he himself had examined them many hundred times, and while unable to judge of their true nature, was convinced that they were neither molecules of fat nor protoplasmic bodies. Dr. Losterfer inferred, that if, as asserted by Prof. Wedl, the bodies had been observed on the first day after the blood was drawn, they could not have been those described by him, which never had appeared within the first twenty-four hours. He further concluded, that if water had been added to the preparations, his corpuscles must have been destroyed, because he had proved them to be shrivelled up on the admixture of water, especially in the earlier stages of their existence.

Prof. Stricker thought it likely that Prof. Wedl, by his stream of water, had at all events washed away the corpuscles together with the blood corpuscles, and had probably by its medium brought many new microscopic objects into the field.

Prof. Wedl replied that the "wet chamber" in which the slides were placed would in any case admit water to the preparation by the well-known principle of the diffusion of fluids, and that the streams thereby produced would effect the same as his method of washing the blood. He also thought that after twenty-four hours the blood corpuscles would have lost their color and might be taken for strange bodies.

Dr. Neumann recounted some of Hallier's discoveries of spores indicative of various diseases, and his own experiments



with the specimens supplied him by Hallier. The foreign and diagnostic bodies he had fully proved to be nothing but decomposed blood corpuscles. He had recently subjected syphilitic blood to constant observation for ten hours a day, and had invariably found the same appearances as in his previous researches.

Dr. Geber, the newly appointed 1st assistant of Hebra, had, at the request of the latter, examined a large number of patients in the smallpox wards, and found, with the absence of syphilitic symptoms, many of these corpuscles, in part precisely similar to those shown him by Losterfer, and in part of a somewhat more bluish-green tint. Moreover, in a dead subject he had found them in great quantities.

Prof. Gruber testified to the exact resemblance of Prof. Wedl's specimens to those of Dr. Losterfer.

It was finally decided that the matter of testing the possibility of a diagnosis of syphilis by means of these corpuscles should be referred to a committee, and the chair appointed the following members of the Society, omitting, in accordance with the wishes of those present, all who had taken any part in the discussion of the evening:—Prof. Rokitsansky (chairman), Profs. Brücke, Billroth, Reichert, Klob, Drs. Auspitz and Basche. To these was added the name of Prof. Karsten, after much excitement and opposition on the part of some present.

The report of this committee I will send you as soon as published, and in the mean time thought that an account of the ground taken by the opposing parties would not be devoid of interest to your readers.

I am very truly yours,

JAMES R. CHADWICK, M.D.

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### Selected Papers.

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#### ON CERTAIN HUMAN PARASITIC FUNGI, AND THEIR RELATION TO DISEASE.

By JOSEPH G. RICHARDSON, M.D., Lecturer on Pathological Anatomy in the University of Penn., &c.

A KNOWLEDGE that there do actually exist such unquestionable parasitic diseases as the potato-rot in the vegetable kingdom, and the muscardine of silk-worms in the animal, has for many years led reflecting minds in the medical profession to reinvestigate, from time to time, ancient stocks of information, and to search after new facts

in the relation of the lower to the higher organisms, of which we ourselves form so important an integral part, in order to discover whether analogues of the disorders named above are also to be found among the maladies to which humanity is subject.

Nor have these researches been by any means unfruitful; for although the observations of Hallier on cholera and typhoid fever, Salisbury on ague and smallpox, &c., are doubted or even ridiculed by a majority of the pathologists and microscopists in this country and Europe, on the other hand the experiments and deductions of Schoenlein, Gruby, Bennett and Tilbury Fox, in regard to favus and the whole group of parasitic cutaneous affections, are now fully accepted by most scientific physicians, and are contested by so small a number of medical men that, although this scanty minority is headed by the famous authority in dermatology, Erasmus Wilson, our doctrine of the existence of dermatophytic disorders in the human race may be considered to-day fairly established. \* \* \*

Dr. R. Cresson Stiles reports in the *N. Y. Medical Record*, vol. ii. p. 340 (1868), some interesting examples of tinea observed in mice, from which the disease could readily infect cats and through them our own species, as probably took place in a case of ringworm occurring some years since in my own practice.

But if, as is now generally conceded, fungous growths similar to that I have just shown you do flourish and produce disease whilst ramifying through and between the epithelial cells of the skin and of the mucous membranes, as in aphthæ, what valid reasons can be *a priori* urged against a belief that they may also develop among the cellular elements of the connective and muscular tissues; or even, if we adopt Prof. Virchow's definition that the blood is "a tissue of cells with a liquid intercellular substance," why may they not live and grow more or less luxuriantly in the liquor sanguinis, especially as it slowly permeates the capillaries and smaller veins?

That such is actually the case, I think we have a large amount of evidence to prove: and one of my objects in the present paper is to lay before you some of the accumulated testimony upon this point, leaving, with one exception, any deduction from the fact—if fact it is accepted to be—for future consideration. \* \* \*

That some of the minute particles constantly found in normal human blood and partly constituting the globulins of Donné, the molecular substance of Griffith and

Henfry, the microzymes of Dr. Burdon Sanderson and sundry French authors, and the germinal matter of Beale—at least in his earlier writings—present the aspect of fungous spores, and develop into Bacteria-like bodies, is shown by the following experiment, which I have repeated a sufficient number of times to convince myself that I have not been misled by any false interpretations of the appearances presented.

A drop of blood from the finger, drawn with careful precautions against adulteration, was covered with a large thin glass in such a manner as to include a few bubbles of air, and the whole hermetically sealed by a layer of gold-size applied at the margin of the covering glass. A suitable field of view being selected, containing between the *rouleaux* of red corpuscles several large open spaces, in which could be seen with a  $\frac{1}{2}$ -inch objective sundry of the tiny particles above referred to, each in active movement—perhaps molecular in its character—the slide was firmly secured in position, and careful observations and drawings were made at short intervals, except through the night, for three days, at the end of which period the minute granules first seen had developed to three times their original size, becoming about  $\frac{1}{1000}$  of an inch long, assuming an elongated dumb-bell shape, and increasing in number so that the place of a primary particle would often be occupied by six, eight or ten Bacteria-like bodies, sometimes irregularly grouped together, but quite frequently assuming the branching arrangement so characteristic of the jointed mycelia of the lower vegetable organisms.

A series of my own experiments performed to demonstrate the presence, mode of entrance, and pathological effects of Bacteria in human blood, were detailed in the *American Journal of the Medical Sciences* for July, 1868, from which I extract the following as the most important:—

"Experiment 4.—At 7.45, P.M., May 17, 1868, I drank four fluidounces of water similar to that employed in the preceding investigations, and containing multitudes of bacteria (estimated as numbering 27,000,000,000). At a quarter past eight, I examined a drop of blood drawn with a cataract-needle from the tip of my finger, and confined between a slide and cover cleaned with strong hydrochloric acid as above described. Under the field of the one-twenty-fifth-inch glass the interspaces between the rows of blood-corpuscles were found to contain multitudes of apparently spherical molecules, in rapid and erratic motion—but

so very minute as to readily escape notice, even with this high power, except under the closest scrutiny; in the course of half an hour, not less than one hundred were observed. At 9, P.M., another drop of blood, examined with the same precautions, exhibited, in addition to these minute particles, other bodies, less active in their movements, of much greater magnitude, and which under an amplification of eleven hundred diameters appeared precisely similar to the bacteria I had been studying a few hours before in the identical decomposing beef-juice imbibed.\* Five of them were thus enlarged sufficiently to exhibit an unmistakable organized structure totally different from their associated aggregations of Beale's germinal matter. Three of these bacteria were each about  $\frac{1}{12000}$  of an inch in length and  $\frac{1}{25000}$  of an inch in width, very distinctly constricted in the middle; a fourth was obviously composed of four, and a fifth of six joints arranged in a straight line, whose motion was of that peculiar waving character so universal among the oscillatoriaceæ. The last two were most clearly visible when they happened to lie vertically to the surface of the glass, and would probably escape observation under the one-eighth-inch except in that position, or be therefore mistaken for simple globular bodies, although in several cases I detected in the second and third experiments (with a lower power) a shadowy elongation of one diameter on the revolving molecules thus observed." \* \* \*

Influenced, therefore, by the positive statements of Drs. Lionel S. Beale and H. C. Wood, Jr., and the direct observations of M. Davaine, Dr. Neffel, and M. E. Semmer, as well as by the results of my own personal investigations, I think we must admit that bacteria not only live but flourish in the blood of animals and of man with more or less frequency during the course of various maladies; yet whether by so existing in the circulating fluid these vegetable organisms constitute causes of disease, or whether they are simply products, or, again, mere accidental accompaniments of morbid action, it appears to me we have not hitherto accumulated a sufficient number of facts to enable us to decide.

In order, however, that such researches as those above referred to may be made, even in their present incomplete state, to aid us in improving the science of medicine,

\* Careful and repeated observations had of course been made to establish the fact that similar particles were not visible in my blood immediately before drinking the bacteria.

permit me to suggest that each bacterium existing in the blood (whether as a poisonous cause, a product, or an accident of disease, I refrain from discussing at present) must during every moment of its life appropriate some minute portion of pabulum, which would otherwise have contributed to nourish the tissues of the animal in which it resides; and that therefore the sum total of the bacterian influence (unless they feed solely upon effete matters, unlike their analogues of the dermatophytic affections) *must* be effective towards diminishing the vital power of the organism on whose life-blood they prey. \* \* \* \* \*

Upon this doctrine it is not difficult to found a theory for explaining the probable mode of operation of quinine and arsenic—so long a problem in therapeutics—when acting as tonics upon the human system in many cases of disease: namely, that in part, at least, they serve their important purpose by rendering the blood less fit for the development of these lower organisms, and in this way *economizing* the supply of nutritive material in the circulating fluid. Many well-known peculiarities in the action of these two principal tonic medicines tend to confirm such a belief—as, for example, the facts: *first*, that quinine and arsenic, two substances which, although unlike in almost every other respect, resemble each other, as shown by the experiments of Dr. Binz, of Bonn, and Dr. Dougall, of Glasgow, in being powerfully inimical to vegetable life, are in many cases our most reliable tonics. *Second*, that, as a general rule, three or four days must elapse before a decided invigorating effect is produced upon the system by these remedies—a period which, we may conclude, is requisite for sufficiently impregnating the blood (without disturbing the digestive organs) to render it an unfavorable medium for the growth of bacteria. *Third*, that after a continuance of some weeks these roborants generally lose their invigorating power upon any particular patient, but seem to have regained it if recommenced after their administration has been for a short time interrupted—*i. e.* subsequent to the development of a new crop of bacteria, which they again destroy. And *fourth*, that arsenious acid has so remarkable an effect upon the arsenic-eaters of Styria, producing such fat, vigorous, and pure-complexioned individuals when steadily continued, and giving rise to such intense suffering if omitted for a short time; results which can hardly be owing to the arsenical preparation supplying any necessary constituent of the hu-

man body, and which seem much more probably to be due to some action in preventing a waste of nutriment, and consequently of vital power.—*Phil. Med. Times.*

At Dr. Richardson's request, we append the following note to the abstract made from his pamphlet:—

Dr. Lionel S. Beale, in his "Disease Germs and their supposed Nature," p. 77, remarks that vegetable parasites found associated with various diseases seem only or chiefly able to develop in structures already decaying, and "if this be so the fungi cannot be regarded as the *cause* of the disease any more than the vultures which devour the carcase of a dead man can be looked upon as the cause of his death." Accepting this excellent comparison, I would illustrate the scope of my paper by extending the analogy and suggesting to the anti-phytopathologists, that if a lonely sick man is assailed by vultures when so enfeebled from any disease or accident that he cannot resist their attacks, he will quickly die, torn to pieces by their cruel beaks, even although his malady is not mortal in itself and requires only time and care for its cure: further, if I, as his physician, have (knowing the habits of vultures) taken the precaution of providing him with some means to impregnate the atmosphere around with quinine or arsenic to that exact degree which, whilst but slightly injurious to his own system, is fatal to the merciless birds of prey which seek to gorge themselves upon his life blood, I thereby avert his greatest danger, and measurably improve his chances of restoration to health.

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## Medical and Surgical Journal.

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BOSTON: THURSDAY, MARCH 7, 1872.

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### MEDICAL SOCIETY OF THE STATE OF NEW YORK.

The sixty-sixth anniversary of the Medical Society of New York was holden at Albany on the 6th of February last, and the following two days. Our numerous readers in New York State will have already received information of the business transacted at the session; but certain series of resolutions which were adopted were of an important character, and will serve as precedents for medical societies in other parts

of the country. We therefore quote certain passages from the *Medical Record* for February 15, without apology or comment.

On the first day of the session, Dr. Eliot presented, on behalf of Dr. Sayre, of New York, the following draft of a bill to be presented to the Legislature, to provide for the protection of physicians and surgeons in cases of alleged malpractice:

SEC. 1. Be it enacted, that in all suits that may be brought against any physician or surgeon for alleged damages in any case arising from any alleged malpractice on the part of any physician or surgeon, that the plaintiff shall, before such suit shall be commenced, give a bond in at least double the amount of the damages claimed in such suit.

SEC. 2. Such bond shall be signed and received by two good and sufficient sureties, who shall be freeholders, to be duly approved by one of the judges of the court in which such suit shall be commenced, conditioned that if the plaintiff shall not maintain such suit, or shall not recover against the defendant, that such sureties shall well and truly pay to the defendant all costs and damages that the defendant may sustain by reason of such suit, and all legitimate expenses incurred in defending the same.

SEC. 3. If, during the pendency of such suit, the said sureties, or either of them, shall become insolvent or irresponsible, the plaintiff shall immediately substitute other good and sufficient sureties, to be approved in like manner, as hereinbefore provided for.

SEC. 4. That, in case the plaintiff shall not comply with the provisions of this act, no such suit shall be maintained against any physician or surgeon for any alleged damage, in any case of alleged malpractice; and that any such suit shall be dismissed upon motion of any defendant, at any time after any process may have been served upon the defendant in any such suit; and such defendant shall be entitled to, and recover against any such plaintiff, such costs and damages as the court may award, upon such motion to dismiss any such suit.

SEC. 5. Whenever any plaintiff shall not maintain the suit, nor recover damages as hereinbefore provided, the defendant shall immediately commence a suit upon the bond hereinbefore provided to be given; and such suit shall be a lien upon the property specified in such bond, upon a notice of *lis pendens* being filed in the court in which such suit shall be commenced.

SEC. 6. This act shall take effect immediately.

The draft was adopted.

On the second day, Dr. F. B. A. Lewis offered the following resolutions, which were also adopted:—

*Whereas*, The Medical Faculty of Harvard University have taken a most important step toward the more thorough preparation of medical graduates, so much needed at this time, by extending the time and mode of study, and by successive and extended examinations; be it

*Resolved*, That this Society, desiring to encourage any means pointing to the better education of medical men, extends its congratulations to the said Faculty of Harvard University, with sincere desires of their success in this most necessary advance.

On the same day, after the reading by Dr. Squibb of an interesting report on Medical Education, the Society adopted the following resolutions:—

*Resolved*, by the *Medical Society of the State of New York*, That the County Medical Societies which constitute this Society, direct their several Boards of Censors to examine and determine the educational qualifications of such young men as propose to commence the study of medicine, and to certify to the fitness of all such as may be found qualified.

*Resolved*, That the Censors of this Society for the several districts be and are hereby constituted Boards of Censors for examining and certifying such qualifications for all the counties within their several districts, in addition to the Censors of the County Medical Societies.

*Resolved*, That any regularly organized Board of Censors, whether of the State or County Societies, be competent to conduct and certify to such examinations, for all persons who may come before them for the purposes herein specified.

*Resolved*, That no member of any medical organization represented in this Society, be permitted to receive a student into his office until such student presents the certificate of a Board of Censors showing his qualifications to enter upon the study of medicine.

*Resolved*, That the accompanying report on Medical Education, adopted by the American Medical Association, together with this report and resolution, be printed separately in the form of a circular, and be sent to the presiding officers of all the organizations represented in this Society, in

sufficient numbers to supply each individual member of such organizations.

On the third day also, on motion of Dr. Roosa, the following resolutions were adopted:—

*Whereas*, The Code of Ethics, to which this Society and the various county societies acknowledge allegiance, provides appropriate and sufficient means for obtaining redress in all matters of difference between physicians,

*Resolved*, That any physician preferring charges, or against whom charges may have been preferred, who shall resort to courts of law or any legal process, shall be considered unworthy of membership in medical societies; and, if a member, shall be declared expelled by the President at a stated meeting of the Society to which the offender may belong.

*Resolved*, That a copy of this resolution be sent to the American Medical Association.

ANOTHER LETTER FROM DR. CHADWICK.—Our readers will take pleasure in perusing the letter from Dr. Chadwick in this week's issue of the JOURNAL, which shows that the subject of syphilis-corporuscles is being carefully considered in Vienna. The names of the committee to whom the subject has been referred is a sufficient guaranty that it will be fairly, but thoroughly treated. We have made arrangements for still farther communications on this interesting topic, which we shall lay before our readers in due season.

**SYPHILIS-CORPUSCLES.** *Messrs. Editors*,—The new syphilis-corporuscles may be real; nothing is impossible. But there is a ground of improbability in the story which I will take the liberty to suggest. The account, as we have it in the JOURNAL, states that blood from syphilitic patients, when placed on glass and kept moist, for a time shows nothing peculiar; then minute globules appear, which grow, and finally exhibit sprouts, &c. Now, why should syphilitic blood require to be removed from the body before germinating and sprouting? If blood, taken at different stages of syphilitic disease, exhibited these corpuscles in different stages of development, such a phenomenon would carry with it a more intrinsic probability. But it is easy to test the American article.

BACTERIUM.

PRACTICAL microscopists will find for sale by Joseph T. Brown & Co. in this city, a very complete stock of microscopes and microscope materials and accessories of all kinds. Mr. Markoe, a member of the firm, himself a scientific microscopist, is prepared to furnish the most reliable instruments from all the makers, including the admirable binoculars made by Beck, of London, and those from Zentmayer, of Philadelphia. He has also on hand mounting materials of all kinds, and the various implements employed by those who are in the habit of using the microscope. We have had occasion ourselves to use these materials and can vouch for their excellent character. We have been particularly pleased with a new preservative material made by Mr. Markoe, principally composed of glycerine and gelatine. It makes an admirable preservative for all inorganic and most organic specimens. Mr. Markoe has on hand a large stock of mounted specimens, including many anatomical sections, healthy and morbid representations of medical and pharmaceutical chemistry, &c., by the most eminent scientific preparers in the country.

A MEETING of the Alumni of the Cleveland Medical School was held at the College on Erie St., in that city, on Tuesday, February 20th, for the purpose of effecting a permanent organization.

The graduates of this institution number between twelve and thirteen hundred, who are now practising in different sections of the country, and the object of this organization is to draw together every year as many of these as is practicable, for the sake of keeping alive their interest in their Alma Mater, and of strengthening that bond of professional union felt by all the Alumni of this old institution. The following officers were elected for the ensuing year: *President*, J. Lang Cassels, M.D., LL.D. *Vice-President*, John Bennett, M.D. *Cor. Secretary*, Frank Wells, M.D. *Orator*, J. P. Kirtland, M.D., LL.D. *Substitute*, J. S. Newberry, M.D., LL.D. *Poet*, R. F. Work, M.D.

The meeting then adjourned until the Tuesday preceding the next College Commencement.

FRANK WELLS, M.D.,  
*Cor. Secretary.*

XYLOL.—This hydrocarbon is likely to become of great importance, if its applica-



tion in cases of smallpox is really followed by such good results as have hitherto been obtained at Berlin.

The *Berlin Klinische Wochenschrift* states that Dr. Zuelzer, Senior Physician at the Charité Hospital, had there administered xylol in cases of smallpox, with the most complete success.

It is given in doses of from three to five drops for children, ten to fifteen drops for adults, every hour to every three hours.

It is harmless, because as much as a teaspoonful at a time has been taken.

The specific action is not yet clearly defined, but early information on this point is promised. The theory at present is that xylol is taken up by the blood, and acts as a disinfectant.

The absolute purity of the 'xylol is important, as toluol and other analogous compounds do not possess this peculiar action, and it seems there are some practical difficulties in obtaining xylol absolutely pure.

Xylol,  $C_8H_{10}$ , was first separated from coal naphtha by Dr. Hugo Müller; it is obtained by fractional distillation until a distillate is obtained of about  $140^{\circ}$  C. boiling point; this is mixed with sulphuric acid, which dissolves xylol, forming xylol-sulphuric acid; this acid is decomposed by dry distillation, and the xylol thus obtained is further purified.

Pure xylol is colorless, it has a faint odor, somewhat like benzol, boiling-point  $139^{\circ}$  C., specific gravity .866.—*London Pharm. Jour.*

**ROYAL VICTIMS TO SMALLPOX.**—Dr. John Gardner (*Edinburgh Medical Journal*) has collected the following history of the ravages of smallpox in some of the royal houses of Europe, hoping thus to impress the public mind more forcibly as to the advantages of vaccination:—

Among the family of Charles I., of Great Britain, of his forty-two lineal descendants up to the date of 1712, five were killed outright by smallpox; viz., his son Henry, Duke of Gloucester; and his daughter Mary, wife of the Prince of Orange, and mother of William III.; and three of the children of James II.: viz., Charles, Duke of Cambridge, in 1677; Mary, Queen of England, and wife of William III., in 1694; and the Princess Maria Louisa, in April, 1712. This does not include, of course, severe attacks, not fatal, such as those from which Queen Anne and William III. suffered. Of the immediate descendants of his contemporary, Louis XIV. of France (who himself survived a severe attack of small-

pox), five also died of it in the interval between 1711 and 1774; viz., his son Louis, the Dauphin of France, in April of 1711; Louis, Duke of Burgundy, son of the preceding, and also Dauphin, and the Dauphiness, his wife, in 1712; their son, the Duc de Bretagne, and Louis XV., the great-grandson of Louis XIV. Among other royal deaths from smallpox in the same period were those of Joseph I., Emperor of Germany, in 1711; Peter II., Emperor of Russia, in 1730; Henry, Prince of Prussia, in 1767; Maximilian Joseph, Elector of Bavaria, December 30, 1777.—*New York Medical Journal.*

**WEBBED-FINGERS.**—At a recent meeting of the London Medical Society, Mr. William Adams showed a boy who was suffering from a webbed condition of several of his fingers. He was being treated by Mr. Tamplin's instrument. The case was in the first stage of the treatment. A hole, with its circumference cicatrized, had been made at the base of the webbed-fingers, and a pencil-case could be passed through it. Simple division, Mr. Adams remarked, gave only a slight improvement; a plastic operation gave a better result. Silver rings to make an opening had been used; but Mr. Tamplin's operation, by which a piece of skin was screwed out by means of two plates of metal, was the best. The compressed tissues soon sloughed out, and the hole was well stuffed with oiled lint. The inflammation and general swelling soon passed off. The operation had been done a month, and the edges of the opening were well cicatrized. The remainder of the web would be treated in the usual way by division with the knife.—*British Med. Jour.*

**MAINE MEDICAL SCHOOL.**—The medical term in Bowdoin College commenced on the 18th ult., the opening lecture being delivered by Alfred Mitchell, M.D., lecturer on pathology and therapeutics. The *College Courant* of New Haven states the number of students to be between 60 and 70. Dr. Thomas Dwight, Jr., of Boston, succeeds Dr. Ford of the Michigan University in the chair of Anatomy; and Dr. T. T. Sabine, of New York, Dr. Green of Portland in the chair of Surgery.

**CLEVELAND (O.) MEDICAL COLLEGE.**—The commencement exercises took place on the 20th ult., when diplomas were presented to the graduating class, numbering 34.

## Medical Miscellany.

FRANK WELLS, M.D., formerly Adjunct Professor of Obstetrics and Diseases of Women and Children in the Cleveland Medical School, has recently been appointed Professor of the above branches, in place of the late Dr. Charles A. Terry.

THE Alumni Prize of the College of Physicians and Surgeons of New York has been awarded to Dr. Frank P. Foster, surgeon to the New York Dispensary, for an Essay on Animal Vaccination.

A NEW VACCINATOR.—Dr. A. L. Carroll, of New York, has invented a convenient scarificator for vaccination, which is manufactured by Tiemann. It is simple and inexpensive, and is well adapted to its purpose.

THE *Photographic Review* for February, containing Illustrations of Syphilitic Ulceration of the Nose, Hypertrophy of the Clitoris, Scrotal Hernia, and Lipomata, is on file at our office, and can be seen by our readers.

DR. LINCOLN.—Our readers in this neighborhood will welcome the speedy return of a former Assistant Editor of the JOURNAL, after a year spent in Europe in the study of diseases of the nervous system.

THE number of graduates in the Medical Department of the University of the City of New York, at the commencement held on the 20th ult., is stated to have been nearly 80. The prizes and Mott medals were presented on the same occasion.

SUGGESTIONS TO CORRESPONDENTS AND READERS.—Articles intended for publication in the JOURNAL must be written plainly and distinctly, on one side of the paper only, properly paged, and with suitable divisions into paragraphs. If so prepared, it is seldom if ever necessary that a proof of the article be sent to the writer. The punctuality required in the issue of a weekly periodical allows little time for proof-alterations or additions. When a proof is sent out, it should be returned to the office *promptly*, as the press in no case will be kept waiting for it.

Anonymous communications will not be published, unless the name and address of the author are entrusted to the Editors.

Accepted articles will generally be inserted in the order in which they are received; this rule will be waived, however, should the nature of the subject or the interest of the Journal require it.

Rejected articles will be returned, if stamps for the requisite postage be sent.

Letters, requiring answer, addressed to the Editors or Publishers for the benefit of the writer, must enclose stamp to ensure a reply.

Original articles, reports of societies, items of medical news, and professional communications of all kinds will be gladly received from members of the profession, wherever resident, so far as they pertain to topics of general interest. In the transactions of societies, the discussions which relate to

questions of local importance, reports of business details, debates *in extenso*, and personalities of all kind, will, as a rule, be excluded.

The Editors do not hold themselves responsible for the views and opinions expressed in articles published; nor will their publication be considered, in any way, as an endorsement of their sentiments.

TO CORRESPONDENTS.—Communications accepted:—Fatal Hæmatemesis, from Cirrhosis of the Liver.

BOOKS RECEIVED.—Practical Lessons in the Nature and Treatment of the Contagious Diseases; an Account of the Primary Syphilitic Poison and of its Communicability, &c. By John Morgan, M.D., F.R.C.S., &c. London: Baillière, Tindall & Cox. 1872. Pp. 338. (From the Publishers.)—Consumption and the Breath re-breathed, being a Sequel to the Author's Treatise on Consumption. By Henry Mac Cormac, M.D., Consulting Physician to the Belfast General Hospital, &c. London: Longmans, Green & Co. 1872. Pp. 155.

PAMPHLETS RECEIVED.—Medico-Legal Considerations upon Alcoholism, and the Moral and Criminal Responsibility of Inebriates. By Paluel de Marmont, M.D., of Kingsbridge, N. Y. Pp. 24.

DIED.—In this city, 2d inst., Charles Gordon, M.D.—At Oakland, Cal., 26th ult., Edward B. Brigham, M.D., Surgeon U.S.N.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending March 2, 1872.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston . . . . .	117	Consumption . . . . . 45
Charlestown . . . . .	13	Pneumonia . . . . . 35
Worcester . . . . .	14	Scarlet fever . . . . . 19
Lowell . . . . .	21	Croup and Diphtheria 12
Milford . . . . .	5	
Cambridge . . . . .	13	
Salem . . . . .	16	
Lawrence . . . . .	12	
Springfield . . . . .	11	
Lynn . . . . .	9	
Gloucester . . . . .	7	
Fitchburg . . . . .	5	
Newburyport . . . . .	0	
Somerville . . . . .	6	
Fall River . . . . .	8	
Haverhill . . . . .	10	
Holyoke . . . . .	4	
	273	

Five deaths from smallpox are reported: two in Boston, two in Springfield, and one in Fitchburg.

GEORGE DERRY, M.D.,  
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 2d, 117. Males, 49; females, 68. Accident, 3—abscess, 1—apoplexy, 2—bronchitis, 3—inflammation of the brain, 2—congestion of the brain, 1—disease of the brain, 5—cerebro-spinal meningitis, 1—cancer, 1—caries of foot, 1—consumption, 24—convulsions, 2—croup, 2—cyanosis, 1—debility, 1—diarrhoea, 2—dropsy, 1—dropsy of the brain, 3—diphtheria, 2—epilepsy, 1—scarlet fever, 6—typhoid fever, 2—disease of the heart, 2—inflammation of parotid gland, 1—intemperance, 2—disease of the kidneys, 2—leucocythæmia, 1—disease of the liver, 1—congestion of the lungs, 2—inflammation of the lungs, 10—marasmus, 3—measles, 3—old age, 5—paralysis, 1—pleurisy, 1—premature birth, 2—peritonitis, 1—puerperal disease, 1—pyæmia, 1—smallpox, 2—disease of the spine, 1—suicide, 1—whooping cough, 2—unknown, 5.

Under 5 years of age, 43—between 5 and 20 years, 12—between 20 and 40 years, 31—between 40 and 60 years, 14—above 60 years, 17. Born in the United States, 82—Ireland, 22—other places, 13.